

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/067,733 04/28/98 SCHWARZE W 98183.PUS

QM12/1028

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EXAMINER

MANTIS MERCADER, E

ART UNIT	PAPER NUMBER
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3737

DATE MAILED:

10/28/99

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	Application No. <b>09/067,733</b>	Applicant(s) <b>Schwarze et al.</b>
	Examiner <b>Eleni Mantis Mercader</b>	Group Art Unit <b>3737</b>



Responsive to communication(s) filed on Apr 28, 1999.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-10 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1-10 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

PLEASE NOTE THAT IDS references are missing from the file. Examiner requests resubmission of IDS patent and references with next action for consideration.

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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## **DETAILED ACTION**

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

### ***Claim Objections***

1. Claims 10 is objected to under 37 CFR 1.75© as being an improper multiple dependent claim . See MPEP § 608.01(n).

### ***Claim Rejections - 35 USC § 112***

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 are vague and indefinite in that it is unclear whether the phrase “characterized in that” is inclusive (such as comprising) or exclusive (such as consisting).

Claim 1 is vague and indefinite as it is unclear what constitutes the method steps of the process. The claim should be re-written so as to clearly set forth in an active verb format the steps required for the process.

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Claim 2 is vague and indefinite in that as it is currently recited the only positive recitation is that of the catalyst. If the intent is to also claim the electrodes and the liquid medium, then those elements should be positively recited in the body of the claim rather than merely being set forth in the preamble.

Claims 4-6 are improper Markush - type claims. As an example, a Markush - type claim is written as follows: --...the catalyst is selected from the group consisting of platinum **and** palladium metals.--

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uebelacker in view of Pavelle et al..

Regarding claims 1-3 Uebelacker teaches a process and a device for generating shock waves for medical uses by means of a spark gap formed between two electrodes mounted in a liquid medium (col. 1, lines 55-59).

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Uebelacker does not teach the use of a catalyst in the liquid medium at least in the area surrounding the electrodes, which catalyst at least partially suppresses the conversion of the liquid medium into gas and/or converts the gas back to the liquid state.

Pavelle et al. teach the use of a catalyst in the liquid medium at least in the area surrounding the electrodes, which catalyst at least partially suppresses the conversion of the liquid medium into gas and/or converts the gas back to the liquid state (col. 5, lines 27-67 and col. 6, lines 23-38).

It would have been obvious to one skilled in the art at the time the invention was made to have used the electrodes and medium as taught by Pavelle et al. in the process and device as taught by Uebelacker in order to minimize the production of undesired gas bubbles (as taught by Pavelle et al. col. 7, lines 12-19) that interferes with the efficient propagation of the shock wave (as taught by Pavelle et al. col. 6, lines 23-38).

Regarding claims 4-8 and 10, Pavelle et al. teach the use of a palladium (col. 1, line 68) including a powder form (col. 2, lines 54-58) and active carbon variations (col. 2, line 42). It would have been obvious to one skilled in the art at the time the invention was made to have used adequate concentrations of the catalyst so as to promote the release of undesired products such as gas bubbles (Pavelle et al. col. 7, lines 12-19).

Regarding claim 9, Uebelacker teaches the use of the liquid medium surrounding the electrodes being held in a closed volume (col. 1, lines 57-58).

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pimiskern teaches a method of orienting electrode tips.

Forssmann et al. teach the use of underwater electrodes for contactless lithotripsy.

Eizenhoefer teaches variable energy shock wave production.

Muller et al. teach a spark gap unit for lithotripsy.

Kunimatsu et al. teach a gaseous-diffusion electrode and electrochemical reactor.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni Mantis Mercader whose telephone number is (703) 308-0899. The examiner's supervisor, Mr. Marvin Lateef, can be reached on (703) 308-3256.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. The fax phone number for this group is (703) 308-0758.

*EMM*

EMM  
October 22, 1999.

*Marvin M. Lateef*  
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